- (A) Satisfactory to the Finance Board:
- (B) Representative of the periods of greatest potential stress given the Bank's portfolio; and
- (C) Comprehensive given the modeling capabilities available to the Bank; and
- (iv) The measure of the market value of the Bank's portfolio at risk may incorporate empirical correlations within or among foreign exchange rates, equity prices, or commodity prices.
- (c) Independent validation of Bank internal market risk model or internal cash flow model. (1) Each Bank shall conduct an independent validation of its internal market risk model or internal cash flow model within the Bank that is carried out by personnel not reporting to the business line responsible for conducting business transactions for the Bank. Alternatively, the Bank may obtain independent validation by an outside party qualified to make such determinations. Validations shall be done on an annual basis, or more frequently as required by the Finance Board.
- (2) The results of such independent validations shall be reviewed by the Bank's board of directors and provided promptly to the Finance Board.
- (d) Finance Board approval of Bank internal market risk model or internal cash flow model. Each Bank shall obtain Finance Board approval of an internal market risk model or an internal cash flow model, including subsequent material adjustments to the model made by the Bank, prior to the use of any model. Each Bank shall make such adjustments to its model as may be directed by the Finance Board.
- (e) Date of calculations. Unless otherwise directed by the Finance Board, each Bank shall perform any calculations or estimates required under this section using the assets and liabilities, off-balance sheet items, and derivative contracts held by the Bank, and if applicable, the values of any such holdings, as of the close of business of the last business day of the month for which the market risk capital requirement is being calculated.

## § 932.6 Operations risk capital requirement.

- (a) General requirement. Except as authorized under paragraph (b) of this section, each Bank's operations risk capital requirement shall at all times equal 30 percent of the sum of the Bank's credit risk capital requirement and market risk capital requirement.
- (b) Alternative requirements. With the approval of the Finance Board, each Bank may have an operations risk capital requirement equal to less than 30 percent but no less than 10 percent of the sum of the Bank's credit risk capital requirement and market risk capital requirement if:
- (1) The Bank provides an alternative methodology for assessing and quantifying an operations risk capital requirement; or
- (2) The Bank obtains insurance to cover operations risk from an insurer rated at least the second highest investment grade credit rating by an NRSRO.

## § 932.7 Reporting requirements.

Each Bank shall report to the Finance Board by the 15th business day of each month its risk-based capital requirement by component amounts, and its actual total capital amount and permanent capital amount, calculated as of the close of business of the last business day of the preceding month, or more frequently, as may be required by the Finance Board.

## § 932.8 Minimum liquidity requirements.

In addition to meeting the deposit liquidity requirements contained in §965.3 of this chapter, each Bank shall hold contingency liquidity in an amount sufficient to enable the Bank to meet its liquidity needs, which shall, at a minimum, cover five business days of inability to access the consolidated obligation debt markets. An asset that has been pledged under a repurchase agreement cannot be used to satisfy minimum liquidity requirements